

WHAT IS CLAIMED IS

1. A resin sealing mold assembly having an upper mold and a lower mold, comprising:
 - a substantially hexahedral cavity for housing at least a lead frame and a semiconductor element; and
 - at least one air releasing groove at contact surfaces of at least said upper mold or lower mold from at least one corner of the hexahedral cavity.
2. The resin sealing mold assembly according to Claim 1, wherein first air vents and second air vents that are independent from each other are formed in a lead frame to be pressed by the upper mold and lower mold at the corners, and said first and second air vents are connected via the air releasing grooves.
3. The resin sealing mold assembly according to Claim 2, wherein said air releasing grooves are continuously formed from said cavity and positioned almost over or under said first air vent.
4. The resin sealing mold assembly according to Claim 2, wherein said cavity formed by said upper mold and said lower mold includes a part of said first air vent.
5. The resin sealing mold assembly according to Claim 1, wherein one end of each said air releasing groove positioned at a cavity side is formed at said contact surfaces proximate said cavity region.
6. The resin sealing mold assembly according to Claim 1, wherein first air vents and second air vents that are independent from each other are formed in said lead frame to be pressed by the upper mold and the lower mold at a plurality of corners, and a resin injection gate is formed at least at one of said corners, one end of said resin injection

gate positioned at a cavity side is formed at said contact surfaces proximate said cavity region, and said one end of the resin injection gate and the first air vent are continued to each other.

7. The resin sealing mold assembly according to Claim 1, wherein a substantial portion of the entire surface around the boundary of the contact surfaces provided continuously from the cavity is configured as a supporting region of the lead frame.